BIG BARREN CREEK NATURAL AREA



MARK TWAIN NATIONAL FOREST ELEVEN POINT RANGER DISTRICT

WHAT IS A NATURAL AREA?

Much of Missouri's original landscape no longer exists, but thanks to the Missouri Natural Areas System, some examples of it are being preserved and protected. Natural areas are important benchmarks to evaluate environmental change and serve as reservoirs of the state biological diversity. Additionally, natural areas provide opportunities for scientific study as well as educational, cultural, and recreational uses. Through protection from development and by managing to preserve the natural characteristics of the areas, the best examples of natural communities are preserved. Natural areas often provide essential habitat for rare and endangered plants and animals.



The Missouri Natural Areas Committee is an interagency committee, consisting of representatives of the Missouri Department of Conservation, Missouri Department of Natural Resources, National Park Service, U.S. Fish and Wildlife Service, The Nature Conservancy and the USDA Forest Service, who coordinate the classification, inventory, designation, and stewardship of natural areas in Missouri. Natural areas are owned by a variety of public agencies as well as private concerns.

The Mark Twain National Forest has a wide selection of natural areas, consisting of fens, sinkhole ponds, glades, forests, and aquatic communities.

BIG BARREN CREEK NATURAL AREA

Big Barren Creek Natural Area has many prominent features enhancing its preservation value: An exceptional Ozark headwaters stream with quality aquatic natural communities, an outstanding upland and bottomland forest, an uncommon dolomite sedimentary rock shut-in and cliffs, and a dolomite glade. Caves and cave-like openings can be seen along the cliffs. A wide variety of animals and plants occur here, including two federally protected endangered species.

OZARK HEADWATERS STREAM

Characteristics of this segment of Big Barren Creek are shallow riffles, minor spring branches, and deep, permanent spring-fed pools (which are rare in this region). All these physical features contribute to the exceptional diversity of aquatic habitats present in this natural area. You will find water willow, chairmaker's rush, and loosestrife in the shallow riffles. The spring branches are rich in water-cress, pale manna grass, golden ragwort, and marsh coneflower. In the deep pools, yellow pond lily and coontail are common.

DRY DOLOMITE CLIFF

Gray dolomite (a type of limestone) cliffs rise above the deep pools. The spotty vegetation on the cliffs includes fragile fern, wild hydrangea, coral bells (alum root) and goldenrod.

SEDIMENTARY ROCK SHUT-IN

A tributary called Devils Run joins Big Barren Creek in the middle of the natural area. The narrow, steep-sided section of this stream is choked with massive chert, dolomite, and sandstone boulders deposited by seasonal flash flooding and characteristic of Ozark waterways

MESIC BOTTOMLAND FOREST

White oak and red oak, bitternut hickory, sycamore, sugar maple, and black walnut trees dominate the canopy of the mesic (moderately moist soil) bottomland forest located in the narrow flood plain of Big Barren Creek. The smaller trees and shrubs of the understory include pawpaw, hornbeam, hoptree, and spicebush, and are underlain by a diverse ground flora.

DRY MESIC CHERT FOREST

Chert is a flint-like rock that resists weathering. It is left behind, embedded in the soil after the less resistant limestone or dolomite rocks have eroded and broken down. On the north and east slopes, a dry mesic chert forest occurs. The canopy is made up of white oak, scarlet oak, and mockernut hickory while flowering dogwood, red maple, and sassafras dominate the understory.

DRY CHERT FOREST

The dry chert forest occurs on the more exposed slopes and narrow ridge tops. Scarlet oak, pose oak, short-leaf pine, and black hickory are dominant, with sassafras, hop hornbeam, and huckleberry in the relatively open understory. Bracken fern and goat's rue are common in the ground layer.

DOLOMITE GLADE

A small dolomite glade – a rocky, barren opening on a moderate-to-steep slope – occurs on the south-facing slope above the shut-in. Typical glade species can be found here, including little bluestern, Missouri coneflower, and houstonia.

WILDLIFE AT BIG BARREN CREEK

The diversity of aquatic features at Big Barren Creek results in a variety of fish and water dependant organisms. The chain pickerel fish quietly lingers under the leaves of the yellow pond lily in the deep pools. Here you will also find the colorful longear sunfish. In the riffles, northern hog suckers can be seen overturning rocks in search of food, while schools of bleeding shiners pick small insects from the surface of the water. Around sunrise and sunset, a variety of animals are likely to visit the water holes. In the spring, frog and toad tadpoles can be seen along the banks.

In the cliffs where caves and cave-like openings are found, listen for eastern phoebe, which may nest in these protected nooks, calling its own name (feebee, feebee). Caves are also home to the dark-sided salamander and eastern pipistrelle bat.

Be sure to use the **WHAT TO LOOK FOR AT BIG BARREN CREEK** checklist (below) when visiting this natural area.

SPECIAL REGULATIONS:

Camping, collection of plants and animals, and vehicular traffic are prohibited. Enjoy all other recreational activities allowed on the National Forest.

OWNERSHIP AND MANAGEMENT

Owned and managed by USDA Forest Service, Mark Twain National Forest – Eleven Point Ranger District.

ADDITIONAL NATURAL AREAS

You may wish to visit nearby natural areas on the same day. Listed below are Mark Twain National Forest, National Park Service, and Missouri Department of Conservation natural areas. For more information on a particular site, check the ownership and contact the Forest Service Ranger District office, National Park Service - Ozark National Scenic Riverways, or the Department of Conservation Wildlife District Supervisor in the town listed.

Cowards Hollow	USFS	Doniphan, MO
Wells Branch Fen	USFS	Doniphan, MO
Haney Pond	USFS	Doniphan, MO
Cupola Pond	USFS	Winona, MO
Marg Pond	USFS	Winona, MO
Overcup Oak Sink	USFS	Winona, MO
Mill Mountain	NPS	Van Buren, MO
Big Spring	NPS	Van Buren, MO

SIZE, LOCATION, AND REGULATIONS

Two hundred thirty-two acres in Carter County.

Located in portions of sections 3, 4, 9, and 10 of T25N, R1W of the Handy 7.5 topographical quadrangle.

From Van Buren: Take U.S. highway 60 west to State highway C. Go south on C approximately 11 miles to Carter County road 167 (just before crossing Big Barren Creek). Turn right on 167 and go 2.3 miles to parking on Forest Service land. Watch for Natural Area boundary signs.

WHAT TO LOOK FOR AT BIG BARREN CREEK NATURAL AREA

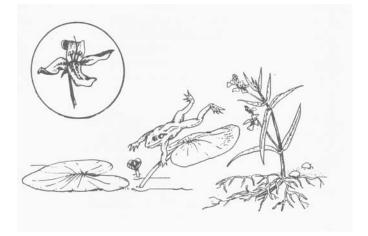
prothonotary warbler Louisiana waterthrush pileated woodpecker eastern phoebe eastern pipstrelle longear sunfish chain pickerel northern hog sucker bleeding shiner dark-sided salamander northern watersnake mink raccoon

white-tailed deer

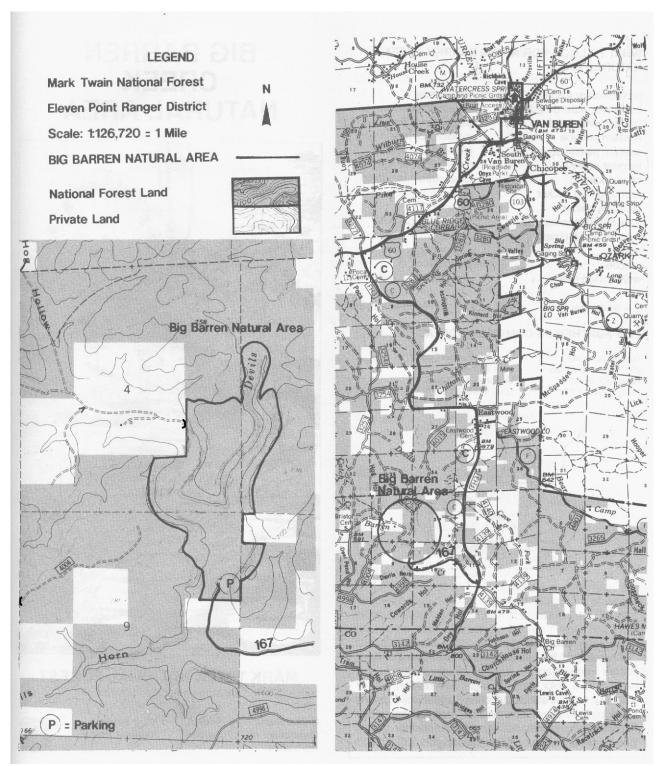
E = endangeredR = rare

watercress water willow yellow pond lilly maidenhair fern jack-in-the-pulpit Carolina phlox (E) loosestrife bellwort long fern (E) dwarf wild iris spicebush sugar maple pawpaw

Ozark witch-hazel



WL = watch list



Note: [at 4004 and Hog Hollow are closed to further Motorized Vehicle Traffic beyond this point.

FOR FURTHER INFORMATION, CONTACT:

Forest Supervisor 401 Fairgrounds Road Rolla, MO 65401 (573) 364-4621 Eleven Point Ranger District #4 Confederate Ridge Road Doniphan, MO 63935 (573) 996-2153